Application No.: 09/973,011

Office Action Dated: June 14, 2005

PATENT REPLY FILED UNDER EXPEDITED PROCEDURE PURSUANT TO 37 CFR § 1.116

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1. (Currently Amended) A method for fingerprint authentication comprising:
  - a) acquiring an image of a fingertip of an-individual;
- b) processing the image to determine a value indicative of a physical parameter of the fingertip, the physical parameter affecting the acquired image and independent of the identity of the individual selected from a group comprising a moisture condition of the fingertip and an applied pressure of the fingertip;
- c) comparing the image to a stored biometric template, the comparison process based on the determined value; and[,]
- d) performing one of an authentication and a rejection in dependence upon the comparison.
- 2. (Original) A method for fingerprint authentication according to claim 1 wherein the comparison process is selected based on the determined value, the comparison process involving different image processing steps for different determined values.
- 3. (Currently Amended) A method for fingerprint authentication according to claim 2 wherein the determined value is quantitatively indicative of the predetermined acquisition physical parameter.
- 4. (Canceled).
- 5. (Currently Amended) A method for fingerprint authentication according to claim [4] 1 wherein the comparison process uses a biometric template selected in dependence upon the determined value, different biometric templates selected for different determined values.
- 6. (Original) A method for fingerprint authentication according to claim 1 wherein the comparison process uses a biometric template selected in dependence upon the determined value, different biometric templates selected for different determined values.

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7. (Previously Presented) A method for fingerprint authentication according to claim 5 wherein the comparison process includes:

- c1) selecting an image-processing process in dependence upon the determined value;
- c2) according to the selected image-processing process, processing the image to remove a subset of features contained therein; and,
- c3) comparing the processed image to the selected biometric template, wherein the biometric template is processed according to a same selected image-processing process prior to being selected for comparison.
- 8. (Previously Presented) A method for fingerprint authentication according to claim 5 wherein the comparison process includes:
- cl) selecting an image-processing process in dependence upon the determined value;
- c2) according to the selected image-processing process, processing the image to remove a subset of features contained therein;
- c3) according to the selected image-processing process, processing the selected biometric template to remove a subset of features contained therein; and,
  - comparing the processed image to the processed selected biometric template.
- 9. (Original) A method for fingerprint authentication according to claim 5 wherein the biometric template is selected from a plurality of biometric templates, each biometric template of the plurality of biometric templates stored in association with a moisture condition of the fingertip.
- 10. (Original) A method for fingerprint authentication according to claim 5 wherein the biometric template is selected from a plurality of biometric templates, each biometric template of the plurality of biometric templates stored in association with an applied pressure of the fingertip.

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11. (Currently Amended) A method for processing a fingerprint image comprising:

- a) acquiring an image of a fingertip of an individual;
- b) processing the acquired image to determine a value indicative of a physical parameter of the fingertip, the physical parameter selected from a group comprising a moisture condition of the fingertip and an applied pressure of the fingertip affecting the acquired image and independent of the identity of the individual; and[,]
- c) selecting an image-processing process in dependence upon the determined value, the image-processing process for removing a subset of features of the acquired image.
- 12. (Canceled).
- 13. (Previously Presented) A method for fingerprint authentication comprising:
  - a) acquiring an image of a fingertip of an individual;
- b) processing the image to determine a value indicative of a physical parameter of the fingertip, the physical parameter affecting the acquired image and independent of the identity of the individual;
- c) processing the acquired image according to a predetermined image-processing process to remove a subset of features from the acquired image;
- d) selecting a biometric template in dependence upon the determined value, the biometric template processed according to the predetermined image-processing process;
  - e) comparing the processed acquired image to the biometric template; and,
- f) performing one of an authentication and a rejection in dependence upon the comparison.
- 14. (Previously Presented) A method for fingerprint authentication according to claim 13 including prior to a):

providing a plurality of biometric template images of a same fingertip, each biometric template image associated with a different predetermined physical parameter of a specific fingertip, the physical parameter affecting the acquired image and independent of the identity of the individual, wherein each biometric template image is processed according to the predetermined image processing process.

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- 15. (Previously Presented) A method for fingerprint authentication according to claim 14 wherein the determined physical parameter is a moisture condition of the fingertip.
- 16. (Previously Presented) A method for fingerprint authentication according to claim 15 wherein providing a plurality of biometric template images of a same fingertip includes repeating for each predetermined moisture condition:

conditioning the fingertip to be in the predetermined moisture condition; placing the conditioned fingertip onto a sensing surface; and, capturing an image of the conditioned fingertip.

- 17. (Currently Amended) A method for fingerprint authentication according to claim 14 wherein the first determined physical parameter is an applied pressure of the fingertip.
- 18. (Previously Presented) A method for fingerprint authentication according to claim 17 wherein providing a plurality of biometric template images of a same fingertip includes repeating for each predetermined applied pressure:

placing the fingertip onto a sensing surface using the predetermined applied pressure; and,

capturing an image of the fingertip.

19. (Currently Amended) A system for fingerprint authentication comprising:
a sensing area for capturing an image of a fingertip of an individual presented thereto;
a memory storage area for storing captured images therein; and[,]

a processor for executing code thereon to process the captured image to determine a value indicative of a physical parameter, the physical parameter selected from a group comprising a moisture condition of the fingertip and an applied pressure of the fingertip affecting the acquired image and independent of the identity of the individual, and to compare the captured image to a template image according to an image-processing process selected in dependence upon the determined value.

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(Canceled). 20.